BEZBORODOV, A.M.; NAMESTNIKOVA, V.P.; ISAKOVA, N.P.; KHOPKO, T.V.

Study of fermentation conditions for strain 26/1. Report No.2: Study of the fermentation conditions for strain 26/1 in laboratory fermentors. Eksp. i klin. issl. po antibiot. 2:235-240 '60. (MIRA 15:5)

(ANTIBIOTICS)
(BACTERIOLOGY--CULTURES AND CULTURE MEDIA)

BEZBORODOV, A.M.; NAMESTNIKOVA, V.P.; KHOPKO, T.V.

Study of fermentation conditions for strain 26/1. Report No.3: Effect of oils and fatty acids on the activity of culture liquid of strain 26/1. Eksp; i klin. issl. po antibiot. 2:241-244 '60. (MIRA 15:5)

(ANTIBIOTICS) (ACIDS, FATTY)
(OILS AND FATS)

KHOPOTOVA, I.I.

Rare case of a multiple stem in common ginseng (Panax ginseng C.A.Mey). Rast.res. 1 no.3:414-415 '65. (MIRA 18:10)

1. Botanicheskiy sad Moskovskogo gosudarstvennogo universiteta imeni M.V.Lomonosova.

KHOPOV, P.M.

25(2) PHASE I BOOK EXPLOITATION SOV/1636

Novyye mashiny; sbornik statey o novykh mashinakh, motorakh, apparatakh sozdannykh na Khar'kovskikh predpriyatiyakh v period 1956-1958 gg. (New Machines; Collection of Articles on New Machines, Motors, and Apparatus Made in Khar'kov Plants From 1956 to 1958) /Khar'kov/ Khar'kovskoye oblastnoye izd-vo, 1958. 226 p. 4,000 copies printed.

Compiler: P.I. Zmaga; Scientific Eds.: V.A. Bulgakov (Chief Engineer, Khar'kov Electromechanical Plant), S.A. Vorob'yev (Candidate of Technical Sciences, Docent), L.A. Shubenko-Shubin (Chief Machine Designer, Khar'kov Turbine Plant, and Corresponding Member, Ukrainian SSR Academy of Sciences); Ed.: Ya.Ye. Donskoy; Tech. Ed.: N.G. Shevchenko.

PURPOSE: This collection of articles is to acquaint the reader with the latest developments and attainments of the Khar'kov machinery manufacturing industry during the 1956-58 period.

COVERAGE: The book, prepared in the form of a descriptive catalog, presents the latest information on machinery and equipment manufactured by Khar'kov plants from 1956-58. A detailed description is given of the following machines and equipment: steam turbines, tractors, self-propelled chassis, diesel engines, diesel locomotives, machine tools including unit metal-cutting machine tools, conveyors, road building machinery, electric power generators, and electrical and electronic instruments. Numerous photographs of the above-listed machinery and equipment are included in the text. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

Zmaga, P.I., Director of the Machinery Manufacturing Division of the Khar'kov oblast' Committee of the Ukrainian Communist Party. On the Path to Further Technological Progress 5

Yakunin, A.I., Vice Chairman of the Sovnarkhoz of the Khar'kov Economic Administrative Region. New Technology as a Powerful Lever for the Growth of Labor Productivity 15

Card 2/6

New Machines; Collection of Articles (Cont.) SOV/1636

✓ Budyakov, A.A., Director of the Khar'kov Electrical Instruments Plant, and A.Ye. Olagovskiy, Head of the Central Plant Laboratory. Quick-response Automatic [Devices] 199

✓ Khopov, P.M., Director of the Khar'kov Plant "Elektrostanok". New Products Manufactured by the "Elektrostanok" Plant 205

✓ Didenko, K.I., Chief Designer of the Plant. Measuring and Controlling Devices Manufactured by the Plant for Control and Measuring Instruments 212

✓ Kucherov, P.M., Director of the Khar'kov Plant for Heating and Ventilating Equipment. Air Conditioners 221

AVAILABLE: Library of Congress

Card 6/6

JG/ad
6-26-59

TRET'YAKOVA, I.V., inzh.; NOVOGRENKO, G.U., inzh.; KHOPOVA, M.P., inzh.

Effect of the temperature of ambient air on the heating of short-circuited AM, MA140, and MAF-series induction motors. Elektrotekhnika 36 no.2:41-43 F '65.

(MIRA 18:4)

33-35-3-23/27

AUTHOR: Khoppe, I.

TITLE: International Conference on the "Interplanetary Matter" (Mezhdunarodnaya konferentsiya o "Mezhplanetnoy materii")

PERIODICAL: Astronomicheskiy zhurnal, 1958, Vol 35, Nr 3, pp 499-502 (USSR)

ABSTRACT: The paper contains a short report on the conference arranged by the section "Astronomy" of the German Academy of Sciences, Berlin, in Jena October 7 - 12, 1957. 49 scientists participated in the meeting; 33 lectures were held. The report contains very short data on the contents of 23 given lectures.

SUBMITTED: February 21, 1958

Card 1/1

GUTNIKOV, B.Z., prof.; RUSAKOV, V.I., kand.med.nauk; PANCHENKO, G.S., kand.med.nauk; KOVALEV, G.G.; AKSENOV, A.I.; KHOPRYACHKOV, N.V.; KOMBACHEKOV, A.Sh.

Late results of treating patients with urethral strictures. Urologiia no.6:45-51 '60. (MIRA 15:5)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. - prof. B.Z. Gutnikov) Rostovskogo meditsinskogo instituta.
(URETHRA--STRICTURE)

KHOPTA, G.N.

Gasification of Siberian brown coals using air-steam blast enriched with oxygen under pressure. Gaz.prom. 4 no.1:11-16 Ja '59. (MIRA 12:1)

(Coal gasification)

KHOPTA, G. N., Cand Tech Sci (diss) -- "Investigation of the influence of blast composition on the indexes of the process of gasifying solid fuel under pressure". Dnepropetrovsk, 1960. 15 pp (Min Higher Educ, Dnepropetrovsk Chem-Tech Inst, im Dzerzhinskiy), 200 copies (KL, No 12, 1960, 128)

KHOPTA, G.N., kand. tekhn. nauk

Study of heat transfer in the combustion chamber of the TP-80 boiler. Energ. i elektrotekh. prom. no.3:29-30 Jl-S '65.
(MIRA 18:9)

TISHCHENKO, G.N., nauchnyy sotrudnik; VAGANOVA, A.D., nauchnyy sotrudnik;
KHOPTYUK, A.M., nauchnyy sotrudnik

Do we know enough about silicate bacteria? Zashch.rast.ot vred. i bol. 4 no.1:33 Ja-F '59. (MIRA 12:2)

1. Nemeshayevskaya opytnaya stantsiya Ukrainskogo nauchno-issledovatel'skogo instituta zemledeliya.
(Bacteria, Silicate)

PETROV, N., podpolkovnik; KHOR, N., mayor

Maintain company quarters according to regulations. Tyl i snab. Sov. Voor. Sil 21 no.4:63-64 Ap '61. (MIRA 14:7)
(Russia--Army--Barracks and quarters)

KHORANOV, A. Kh., Cand Med Sci -- (diss) "Cancer of the large intestine and its surgical treatment." Moscow, 1960. 19 pp; (Ministry of Public Health USSR, Central Inst for Advanced Training of Physicians); 200 copies; price not given; (KL, 17-60, 173)

KHORANOV, A.Kh.

Surgical therapy in cancer of the large intestine. Vop. onk. 7 no.1:14-19 '61. (MIRA 14:2)
(INTESTINES--CANCER)

KHORANOV, A.Kh.

Immediate postoperative mortality and late results of surgical treatment of cancer of the large intestine. Khirurgiia 37 no.2:74-78 F '61. (MIRA 14:1)

1. Iz 1-y kafedry klinicheskoy khirurgii (zav. - deystvitel'niy chlen AMN SSSR prof. V.R. Braytsev) TSentral'nogo instituta usovershenstvovaniya vrachey na baze TSentral'noy klinicheskoy bol'nitsy imeni Semashko Ministerstva putey soobshcheniya.

(INTESTINES—CANCER)

CHEKMAREV, A.I.; MIKHEL', M.L.; KRONGAUZ, I.A.; VITENBERG, Ye.M.; BABUSHKINA, S.I., red.; KHORAS, L.I., red.

[Packing materials for chemicals] Tara dlia khimicheskikh produktov. Moskva, Nauchno-issl.in-t tekhniko-ekon.issl., 1960. 229 p. (MIRA 13:8)
(Chemicals) (Packing for shipment)

GOL'DIN, Ya.A., glav. red.; KHORAS, L.I., red.

[Progressive practices of Cherepovets metalworkers] Peredovyi opyt Cherepovetskikh metallurgov. Moskva, [Metallurgiia] 1965. 93 p. (MIRA 18:10)

1. Moscow. TSentral'nyy nauchno-issledovatel'skiy institut informatsii i tekhniko-ekonomicheskikh issledovaniy chernoy metallurgii.

KHORASANYAN, G., inzhener.

Erecting precast tanks in mountains. Stroitel' no.3:6-7 Mr '57. (MIRA 10:4)
(Tanks) (Precast concrete)

KHORASANYAN, G.

A useful investigation. Prom. Arm. 6 no.6:73-74 Je '63.

(Lightweight concrete)

BURNAZYAN, R., kand.ekonomicheskikh nauk; KHORASANYAN, G., inzh.

Large-panel housing construction in Armenia. Zhil. stroi. no.12: 6-8 '61. (MIRA 15:2)

(Erivan--Apartment houses)

KHORASANOV G L.

Reports presented at the 5th Intl. Conference on Ionization Phenomena in Gases. Munich, 28 August - 1 September 1961.

a. G A Pasilevskaya, A N Andrianov, V F Demichev and V I Vasilyev

"Investigation of a Pulse Discharge in a Hollow Cylindrical Gas Sheath"

b. B G Brezhnev Ya S Makrinov

"Energy Measurements of Fast Electrons Formed During a Powerful Pulse Discharge" Chamber

c. A B Berezin, A N Zaydel, and G M Malyshev

"On a Method of Spectralizcopic Investigation of the Hydrogen Discharge Chamber Walls Interactions"

d. V F Kitayeva N N Sobolev

"On the Hydrogen Lines Broadening Under the Carbon Arc and Detonation Wave Conditions"

e. S G Alikhanov R A Demirkhanov, A V Komin, G G Podlesnyy, G L Khorasanov

" An Investigation of Plasma Diffusion in the Magnetic Field"

f. V S Komelkov, Yu V Skvortsov V N Tereshchenko S S Tserevitinov

"Dynamical Current Cord"

g. N N Sobolev

"A Spectroscopically Studied State of Gases Following the Detonation Wave"

h. B N Ilin, Ye S Solovyev N V Fedorenko

"Molecular Hydrogen Ionization by Gas Hydrogen Atoms"

i. I P Flaks, O N Ogurtsov

"Ionization of Gases Induced by Multi-charged Ions"

j. P M Morozov, L N Pilgunov

"The Source for Molecular Hydrogen Ions Formation at the Ogra Device"

k. A L Bezbatchenko V V Kuznetsov N P Malakhov N N Semashko

"Injection of an Ionic Beam into the Ogra Magnetic Trap"

l. V Ye Yurasova

"On Directed Emission of Particles from a Copper Single Crystal Sputtered by Bombardment with Ions"

33

L 13813-63 EWG(k)/BDS/EWT(1)/EEC(b)-2/ES(w)-2 AFFTC/AFWL/ASD/
ESD-3/SSD Pz-4/Pab-4/Pi-4/Po-4 IJP(C)/AT

ACCESSION NR: AP3004386 S/0109/63/008/008/1489/1490 81

AUTHOR: Demirkhanov, R. A.; Gevorkov, A. K.; Popov, A. F.; Khorasanov, G. L.

TITLE: On the use of a decaying plasma for detection of an shf signal

SOURCE: Radiotekhnika i elektronika, v. 8, no. 8, 1963, 1489-1490

TOPIC TAGS: shf signal demodulation, plasma pulse discharge, decaying plasma, plasma afterglow quenching, plasma decay

ABSTRACT: Some results of a study on the use of decaying plasma as an shf detector are presented. Experiments were carried out with plasma produced by a pulse discharge in helium for the case of a three-particle recombination, which was assumed to be the most probable process. The plasma was produced in glass tube (1) (see Fig. 1 of Enclosure), inserted in selenoid (4) by means of shf pulses of 1 to 3 sec from a magnetron. An shf probing signal from a sweep generator witn a frequency deviation of 3200 to 3380 Mc was applied during the period between two magnetron pulses to cavity (2) for plasma firing. The quenching effect on an afterglow by the probing signal was recorded by means of a photoelectron multiplier, whose output pulse was applied to one channel of a dual-trace oscilloscope. The other channel of the oscilloscope was fed by a

Card 1/42

L 13813-63
ACCESSION NR: AP3004386

demodulated and amplified probing signal. The plasma density was determined by cavity detuning. The whole system was synchronized by a special circuit controlled by a master oscillator with a pulse repetition frequency of 60 cps. The discharge tube was filled by spectrally pure helium up to a pressure of 10^{-1} to 10^{-2} mm Hg. Fig. 2 represents a typical oscillogram of the glow intensity variations of a plasma at a wavelength of 3888 Å in the presence of the probing signal. The selected wavelength corresponds to the transition of an electron to the metastable helium level as a result of a triple collision: $He^{+} + e^{-} + e^{-} \rightarrow He^{*} + e^{-}$. The oscillogram illustrates a case of cyclotron resonance. In a number of cases, a complete plasma light beam was recorded within the spectral sensitivity of a multiplier (see Fig. 2b). The minimum power of the probing signal which leads to marked quenching of afterglow (signal-to-noise ratio at the output of the multiplier, approximately 2) is approximately 10^{-8} to 5×10^{-7} w. Orig. art. has: 2 figures.

ASSOCIATION: none

SUBMITTED: 19Nov63 DATE ACQ: 20Aug63 ENCL: 02

SUB CODE: SD NO REF SOV: 001 OTHER: 005

Card 2/2

ALIKHANOV, S. G.; ZAKHAROV, V. Ye.; KHORASANOV, G. L.

Plasma diffusion in a magnetic field caused by Coulomb collisions. Atom. energ. 14 no.2:137-142 F '63. (MIRA 16:1)

(Magnetic fields) (Plasma(Ionized gases)) (Collisions(Nuclear physics))

KHORASANOV, G.L.

Recombination radiation in the diffusion break-up of a plasma in a magnetic field. Zhur. tekh. fiz. 33 no.10:1193-1195 O '63.
(MIRA 16:11)

KHORASANYAN, G., inzh.; AKOPYAN, N., inzh.

Large-panel housing construction in Armenia. Prom.Arm. 5 no.6:19-24
Je '62. (MIRA 15:7)
(Armenia--Apartment houses--Design and construction)
(Precast concrete construction)

KHORASANYAN, G.A., inzh.

Rapid construction of a tunnel to carry a mountain river. Stroi. prom. 36 no. 7:18-19 Jl '58. (MIRA 11:8)

(Tunneling)

KHORASANYAN, G.A.; ATSAGORTSYAN, Z.A., otv. red.; SHTIBEN, R.A., red. izd-va; KAPLANYAN, M.A., tekhn. red.

[Economics of large-panel house building in Armenia] Ekonomika krupnopanel'nogo domostroeniia v Armenii. Erevan, Izd-vo Armianskoi SSR, 1961. 137 p. (MIRA 15:3)
(Armenia—Construction industry—Costs)

KHORASH, N

USSR/Cultivated Plants. Fodder Plants. M

Abs Jour : Ref Zhur-Biol., No 15, 1958, 68242

Author : Pynzar', S., Khorash, N.
Inst : Kishenev Agricultural Institute.
Title : Sowing Corn Mixed with Dolichos.

Orig Pub : Agrikultura shi veteritul Moldovey, 1957, No 5, 46-49

Abstract : In 1955, at the experiment station of the Kishenev Agricultural Institute four varieties of corn were tested in mixed sowings with the cow bean dolichos (Kishinev climbing variety. The following corn varieties were used: Moldavian orange, Lining, Kishinev white siliceous, and Cinquantine. Dolichos planted with the late-maturing corn strain, Lining, produced the lar-

Card : 1/2

LINDTROP, G.T.; KHORAVA, G.V.; INGUL'SKAYA, I.I.

Effect of associated helminthiasis on the course of typhoid fever and problems of helminth eradication in infectious diseases. Med. paraz. i paraz. bol. 27 no.4:419-422 Jl-Ag '58. (MIRA 12:2)

1. Iz Gudautskoy infektsionnoy bol'nitsy Ministerstva zdravookhraneniya Abkhazskoy ASSR.
(HELMINTH INFECTIONS, compl.
typhoid fever (Rus))
(TYPHOID FEVER, compl.
helminth infect. (Rus))

KHORAVA, G.V.; KISLENKO, N.S.; KURMAZIYA, N.M.; AKUSBA, Z.V.

Treatment of ascariasis with naphthamon (alcopar). Med. paraz. i paraz. bol. 32 no.4:397-399 Jl-Ag '63. (MIRA 17:8)

1. Iz Gudautskoy infektsionnoy bol'nitsy Ministerstva zdravookhraneniya Abkhazskoy ASSR.

KHORAVA, G.V.

Study of the epidemiology of Botkin's disease in Gudauta District, Abkhaz A.S.S.R. Zhur. mikrobiol., epid. i immun. 40 no.6:22-25 Je '63. (MIRA 17:6)

1. Iz Gudautskoy infektsionnoy bol'nitsy.

KAKABADZE, M.G.; LINDTROP, G.T.; BERNSHTEYN, A.D.; KHORAVA, G.V.;
KVARATSKHELIYA, G.M.

Role of farm animals in the transmission to human beings of leptospirosis of serotype II in the Abkhazian A.S.S.R. Sbor. trud. Med. nauch. ob-vo Abkh. 2:199-203 '59. (MIRA 14:10)

1. Iz leptospiroznogo otdeleniya (zav. M.G.Kakabadze) Respublikanskoy sanepidstantsii Ministerstva zdravookhraneniya Abkhazskoy ASSR (glavnyy vrach V.L.Gvaliya) i Gadautskoy infektsionnoy bol'nitsy (glavnyy vrach G.V.Khorava).

(ABKHAZIA--LEPTOSPIROSIS)
(ANIMALS AS CARRIERS OF DISEASE)

LINDTROP, G.T., zasluzhenny vrach Abkhazskoy ASSR; KHORAVA, G.V.

Leptospirosis canicola in human subject. Klin.med. 37 no.2:132-134
F '59. (MIRA 12:3)

1. Iz Gudautskoy infektsionnoy bol'nitsy.
(LEPTOSPIROSIS, case reports,
canicola (Rus))

LINDTRON, G.T.; KHORAVA, G.V.; INGUL'SKAYA, I.I.

Treatment of necatoriasis, ascariasis, enterobiasis, and trichocephaliasis with bifenium hydroxynaphthoate (preparation "alcopar"). Med.paraz.i paraz.bol. 29 no.4:409-413 Jl-Ag '60.

(MIRA 13:11)

1. Iz Gudautskoy infektsionnoy bol'nitsy Ministerstva zdravookhraneniya Abkhazskoy ASSR.

(ANTHELMINTICS) (WORMS, INTESTINAL AND PARASITIC)

SOLOSHENKO, I.Z.; KHORAVA, G.V.

Carriage of Leptospirae by dogs in the Maritime Zone of the Abkhazian ASSR. Zhur. mikrobiol. epid. i immun. 31 no.7:140-141 Jl '60.
(MIRA 13:9)

1. Iz Instituta epidemiologii i mikrobiologii im. Gamalei AMN SSSR i Gudautskoy infektsionnoy bol'nitsy.
(ABICHAZIA—LEPTOSPIROSIS)
(DOGS AS CARRIERS OF DISEASE)

KHORAVA, G.V.; KURMAZIYA, N.M.; AKUSBA, Z.V.

Testing the preparation, chloroquine, in human ascariasis. Med. paraz.i paraz.bol no.3:340-341 '61. (MIRA 14:9)

1. Iz Gudautskoy infektsionnoy bol'nitsy Ministerstva zdravookhraneneiya Abakhzskoy ASSR.
(ASCARIDS AND ASCARIASIS) (QUINOLINE)

SOLOSHENKO, I.Z.; KHORAVA, G.V.

Role of cattle in the epidemiology of leptospirosis icterohemorrhagiae. Zhur.mikrobiol.epid.i immun. 32 no.2:79-80 F '61. (MIRA 14:6)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR i Gudautskoy infektsionnoy bol'nitsy.
(WEIL'S DISEASE) (ABKHAZIA--CATTLE DISEASES AND PESTS)

KHORAVA, G.V.

Naphthamon (alcopar) treatment in necatoriasis and some other helminthiases. Med.paraz.i paraz.bol. no.1:95-98 '62.
(MIRA 15:5)

1. Iz Gudautskoy infektsionnoy bol'nitsy Ministerstva zdravookhraneniya Abkhazskoy ASSR.
(ALTHELMINTICS) (WORMS AS CARRIERS OF DISEASE)

KHORAVA, G.V.

Naphthamon (alcopar) treatment in necatoriasis and some other helminthiases. Med.paraz.i paraz.bol. no.1:95-98 '62. (MIRA 15:5)

1. Iz Gudautskoy infektsionnoy bol'nitsy Ministerstva zdravookhraneniya Abkhazskoy ASSR.
(ALTHELMINTICS) (WORMS AS CARRIERS OF DISEASE)

KARLOV, L.B.; SHOSHKOV, Ye.N.; MYASISHCHEV, V.I., red.;
KHORBECHKO, I.G., red.; SOKOLOVA, G.F., tekhn. red.

[Underwater acoustics in naval operation] Gidroakustika v voennom dele. Pod obshchei red. V.I.Miasishcheva. Moskva, Voenizdat, 1963. 148 p. (MIRA 16:6)

(Underwater acoustics)
(Naval art and science)

VERZHIKOVSKIY, Anatoliy Pavlovich; GABIS, Nikolay Vladimirovich; KITAYEV, Nikolay Mikhaylovich; TYNYANKIN, Ivan Ignat'yevich; KHORBENKO, I.G., kapitan 2 ranga, red.; KUZ'MIN, I.F., tekhn. red.

[Concise dictionary on radio electronics] Kratkii slovar' po radioelektronike. Moskva, Voenizdat, 1964. 255 p.
(MIRA 17:2)

KHORBENKO, Ivan Grigor'yevich; KULINICH, D.D., red.; SOKOLOVA, G.F.,
tekhn. red.

[Sounds in the ocean depths]Zvuki v morskikh glubinakh. Moskva, Voenizdat, 1962. 73 p. (MIRA 15:11)
(Underwater acoustics) (Ultrasonic waves)

KHORBENKO, Ivan Grigor'yevich; SHEIN, A.S., doktor fiz.-mat. nauk, retsenzent; ANTONOVA, S.D., red.

[In the world of inaudible sounds] V mire neslyshimykh zvukov. Moskva, Mashinostroenie, 1964. 120 p. (MIRA 17:4)

KHORBENKO, Ivan Grigor'yevich; MEL'NIKOVA, Zh.M., red.

[Ultrasound in action] Ul'trazvuk v deistvii. Moskva,
Izd-vo "Znanie," 1965. 47 p. (Novoe v zhizni, nauke,
tekhnike. IV Seriia: Tekhnika, no.1) (MIRA 18:1)

RACHKOV, V.K.; KHORBENKO, I.G., kapitan 2 ranga, red.; KOKINA, N.N., tekhn. red.

[Marvellous crystals]Chudesnye kristally. Moskva, Voenizdat, 1962. 72 p. (MIRA 16:3)
(Crystals) (Piezoelectric substances)

MUSHTAKOV, Porfiriy Vasil'yevich; KHORENKOV, Andrey Vasil'yevich;
SOKOLOV, I.A., polkovnik, red.

[Automation of artillery control] Avtomatizatsiia upravleniia artilleriei. Moskva, Voenizdat, 1965. 95 p.
(MIRA 18:12)

KHORDAS, G.S., inzh.

Refrigerating machinery on the new "Sibir'"-type transport refrigerator ships. Sudostroenie 30 no.7:20-25 Jl '64.
(MIRA 18:9)

LOSKUTOV, Vladimir Vasil'yevich; KHORDAS, Georgiy Saulovich. Prinimal uchastiye LAZAREV, F.L., inzh.; ALEKSANDROV, A.V., dots., kand. tekhn. nauk, retsenzent; MOCHUL'SKIY, A.A., inzh.; GUS'KOV, M.G., nauchn. red.; OZEROVA, Z.V., red.; SHISHKOVA, L.M., tekhn. red.

[Hydraulic calculations of ship systems] Gidravlicheskie raschety sudovykh sistem. Leningrad, Sudpromgiz, 1963. 311 p. (MIRA 17:3)

LOSKUTOV, Vladimir Vasil'yevich; KHORDAS, Georgiy Saulovich. Prinimal uchastiye: LAZAREV, P.L., inzh.. YANOVSKIY, V.Ya., nauchnyy red.; NIKITINA, R.D., red.; TSAL, R.K., tekhn.red.

[Thermal calculations of ship systems] Teplovye raschety sudovykh sistem. Leningrad, Gos.soiuznoe izd-vo sudostroit.promyshl., 1958. 199 p. (MIRA 12:4)

(Ships--Heating and ventilation)

BYKHOVSKIY, S.I.; VASIL'YEV, V.G., inzh.; KHORDAS, G.S., inzh.

High pressure air conditioning system. Sudostroenie 25 no.7:12-14
Jl '59. (MIRA 12:12)
(Ships--Air conditioning)

78-3-6-20/30

AUTHORS: Ryss, I. G., Khordas, I. S.

TITLE: The Solubility-Polytherms of Potassium- and Cesium-Tetrafluorborates (Politermy rastvorimosti tetraftoroboratov kaliya i tseziya)

PERIODICAL: Zhurnal Neorganicheskoy Khimii, 1958, Vol. 3, Nr 6, pp. 1410-1415 (USSR)

ABSTRACT: The solubility of potassium- and cesium-tetrafluorborates was determined and compared with the values given in publications. A method for the determination of the solubility of the complexcompounds was given, in which a partial hydrolysis of the complex ions takes place. The activity coefficients of KBF_4 and $CsBF_4$ were also determined. Dependence of the logarithms of the activity in saturated solutions on temperature, was determined. The solubility of KBF_4 and $CsBF_4$ was determined at temperatures of from 0 to 70°C. The dependence of the activity of saturated solutions of KBF_4 and $CsBF_4$ on temperature is expressed by the following equation:

Card 1/3

The Solubility-Polytherms of Potassium- and Cesium Tetrafluorborates 78-3-6-20/30

$$\lg a_{KBF_4} = 7470-3080/T$$

$$\lg a_{CsBF_4} = 8236-3146/T$$

The heat of solubility for KBF_4 is expressed by $\Delta H^o = 14,1$ k cal/mol, $\Delta F^o_{298} = 3,90$ k cal/mol and $\Delta S^o_{298} = 34$ k cal/mol/degree.

The heat of solubility of $CsBF_4$ is expressed by $\Delta H^o = 14,5$ k cal/mol, $\Delta F^o_{298} = 3,24$ k cal/mol and $\Delta S^o_{298} = 38$ k cal/mol/degree. The great similarity of the ΔH^o of the two above-mentioned salts shows that the lattice energy differs very little and that also the hydration-energy of K^+ and Cs^+ is very similar. The entropy of solubility of KBF_4 is lower than that of $CsBF_4$. This leads to the

Card 2/3

The Solubility-Polytherms of Potassium- and Cesium Tetrafluorborates 78-3-6-20/30

conclusion that the solubility of $CsBF_4$ is more endothermic.
There are 1 figure, 3 tables, and 11 references, 4 of which are Soviet.

ASSOCIATION: Dnepropetrovskiy institut inzhenerov zheleznodorozhnogo transporta (Dnepropetrovsk Institute for Railroad Engineering)

SUBMITTED: April 22, 1957

AVAILABLE: Library of Congress

1. Potassium tetrafluorborates--Solubility. 2. Cesium tetrafluorborates--Solubility

Card 3/3

KAZAKOVA, Ye.A., kand.tekhn.nauk; MESHCHERYAKOV, N.V., kand.tekhn.nauk;
MUZYCHENKO, L.V.; DENEGA, A.I.; KHORDINA, Yu.A.; NIKIFOROVA, N.V.

Cooling of granulated fertilizers in a fluidized bed. Khim.
prom. no.5:330-336 My '62. (MIRA 15:7)
(Fertilizers and manures)
(Fluidization)

KHORECHKO, I., inzh.-radist

Neighbors of the colorful rainbow. Znan. ta pratsia no.5:5-6 My '63. (MIRA 16:6)

(Waves)

ACCESSION NR: AP4009135 S/0056/63/045/006/2068/2069

AUTHOR: Lazarev, B. G.; Khorenko, V. K.; Korniyenko, L. A.; Krivko, A. I.; Matsakova, A. A.; Ovcharenko, O. N.

TITLE: On the layered and filamentlike structure of the superconducting alloys Nb-Zr and Nb-Ti

SOURCE: Zhurnal eksper. i teoret. fiziki, v. 45, no. 6, 1963, 2068-2069

TOPIC TAGS: superconducting alloy, niobium zirconium alloy, niobium titanium alloy, layered structure, filament structure, electron microscopic investigation, plastic deformation, critical magnetic field, solid solution, saturated solid solution, critical current density

ABSTRACT: Data are presented on electron-microscopic observations of thin films and filamentary systems of tracks in alloys of Nb with 25 at. % Zr and of Nb with 66 at. % Ti. Samples of the original alloy were compared with samples reduced in thickness by rolling from 2-5 mm to 0.05-0.5 mm at room temperature. When observed by

Card 1/2

ACCESSION NR: AP4009135

cathode etching, only a few undeformed samples showed a thin filamentlike precipitate structure, but the deformed samples showed the presence of a developed system of layers even at a magnification of 450. Under the electron microscope, sections cut at a very small angle ($\leq 3^\circ$ for Nb-Zr) showed more and more fine elements with increasing magnification. The alloy contains a whole set of layer thicknesses from several times ten Angstrom up, which are not uniformly distributed but come in packets. The conductivity drops to its initial value after annealing at 100°C. This demonstrates experimentally that the increase in the current density of the superconducting current (from 100-1000 to 20000-40000 A/sq.cm.) in the critical magnetic field is due to the developed system of precipitated layers and filaments.

ASSOCIATION: Fiziko.-tekhnicheskiy institut AN UkrSSR (Physicotechnical Institute, AN UkrSSR)

SUBMITTED: 27Aug63 DATE ACQ: 02Feb64 ENCL: 00

SUB CODE: PH, MA NO REF SOV: 007 OTHER: 003

Card 2/2

L 15179-66 EWP(e)/EWT(m)/T/EWP(t)/EWP(b) IJP(c) JD/WW/JG

ACC NR: AP6002665

SOURCE CODE: UR/0126/65/020/006/0860/0863

25
72
B

AUTHOR: Kolomiyets, L. D.; Khorenko, V. K.

ORG: none

TITLE: Oriented growth of oxide film on beryllium 18 27,55

SOURCE: Fizika metallov i metallovedeniye, v. 20, no. 6, 1965, 860-863

TOPIC TAGS: metal oxide, beryllium, oxide formation, crystal growth, metal diffusion, electron diffraction analysis

ABSTRACT: The structure of the oxide film growing on the surface of nontextured polycrystalline Be was investigated. 99.98% pure Be was vacuum-evaporated onto a glass substrate dusted with rock salt. Film thickness 18,44 was measured by the optical interference method and found to be 400-600 Å. The films were removed in distilled water, trapped on electrolytic Ni meshes and placed in an electric furnace. Oxidation was performed in air at 400, 500, 600, 750 and 800°C. Prior to the oxidation an electron-diffraction examination of the films revealed no texture (preferred orientation). Following the oxidation, electron diffraction patterns of the oxidized Be films were taken at various angles from 0 to 60° with respect to the electron beam in order to detect the texture maxima. For comparison, the structure of oxide films was also examined on massive vacuum-melted or hot-pressed specimens of Be. Findings: the oxide

27

Card 1/3

UDC: 539.23:541.45+546.45

2

3

film on condensates and bulk specimens of Be displays preferred orientation throughout the temperature range from 400 to 800°C. At lower temperatures, when the diffusion rate of Be ions in the oxide film is low, the process of formation of the oxide film on Be may largely be determined by the chemosorption of oxygen on the oxide surface and the interaction between Be ions and adsorbed oxygen. It may be assumed that in such cases the orientation of the oxide film coating Be is associated with the preferential alignment of the BeO planes with the greatest packing density of oxygen ions parallel to the surface of the specimen. The oxidation rate of Be in dry gases at elevated temperatures is in all likelihood determined by the diffusion rate of metal ions in the BeO film. This is implied primarily by the ratio between the sizes of the ions of oxygen $r_O = 1.32$ and beryllium $r_{Be} = 0.36$ as well as by the fact that BeO is a semiconductor with cation conduction. As the oxidation temperature increases, the diffusion rate of Be ions in the oxide films increases. Considering that noncubic crystals are characterized by anisotropy of diffusion rate, the growth of BeO crystal particles in different directions may occur at different rates. Under these conditions, as the oxidation temperature increases, the type of texture of the oxide film may vary, as had indeed been observed in this study which showed that oxidation at 400°C produces a mixed texture of two types, (0002) and $(10\bar{1}3)$, whereas oxidation at 500-800°C produced a texture of the $(10\bar{1}3)$ orientation alone. Contrary to the findings of J. S. Kerr and H. J. Wilman (Inst. Metals, 1956, 84, 379) the presence of these textures cannot be attributed to epitaxial growth, since both

L 15184-66 2

ACC NR: AP6002671

duces H_c by eliminating the domain-boundary-consolidating effect of LOS but it leads to the rise of a magnetic texture where the preferred orientation of the magnetization of domains is parallel to the H_A field. The fact that H_c after quenching is greater in every direction of the specimen than after TMTR indicates that the disordered state in itself is not a cause of the enhancement of magnetic properties in alloys with order-disorder transitions, contrary to what had been thought previously, and that the effect of "permalloy" treatment is conditioned entirely (or chiefly) by the suppression of LOS during this treatment. The attendant investigation of the effect of TMT on monocrystalline E330 ferrosilicon steel did not produce unambiguous results, possibly because of the dissipation of magnetostrictive stresses. It is worth noting that practical applications may be found for the isotropic decrease in H_c following TMTR. Orig. art. has: 2 figures.

SUB CODE: 11, 20/ SUBM DATE: 26Dec64/ ORIG REF: 006/ OTH REF: 005

magnetic alloy 18

Card 3/3

KAZARYAN, A., general-mayor zapasa; REZNIK, D., polkovnik; KHORENKOV, A., polkovnik; BELOUSOV, P., podpolkovnik; PARAMONOV, V., podpolkovnik; ODEGOV, A., kapitan

Tactics of small units in modern combat; discussion of the article in no. 2. Voen.vest. 43 no.7:50-53 Jl '63. (MIRA 16:11)

SOKOLOV, Igor' Aleksandrovich, polkovnik; KHORENKOV, Andrey Vasil'yevich, polkovnik; DENISOV, I.I., inzh.-podpolkovnik, red.; KUZ'MIN, I.F., tekhn. red.

[Observation instruments in field artillery] Pribory nabliudeniia nazemnoi artillerii. Moskva, Voen.izd-vo M-va oborony SSSR, 1961. 96 p. (MIRA 15:1)
(Fire control(Gunnery))—Optical equipment)

SOKOLOV, Igor' Aleksandrovich, polkovnik; KHORENKOV, A.V., polkovnik, dots., kand. voyennykh nauk; KONDRAT'YEV, N.L., red.; KUZ'MIN, I.F., tekhn. red.

[Work with a map and an aerial photograph on the ground] Rabota s kartoi i aerosnimkom na mestnosti. Moskva, Voenizdat, 1963. 77 p. (MIRA 17:3)

MNDZHOYAN, A.L.; AFRIKYAN, V.G., akademik; BADALYAN, V.Ye.; MARKARYAN, E.A.;
KHORENYAN, G.A.

Investigation of derivatives of p-alkoxybenzoic acids. Dokl. AN Arm. SSR 27 no.3:161-177 '58. (MIRA 11:12)

1.AN Armyanskoy SSR.
(Benzoic acid)

MNDZHOYAN, A.L.; AFRIKYAN, V.G.; OGANESYAN, A.N.; KHORENYAN, G.A.;
ALEKSANYAN, R.A.; STEPANYAN, N.O.

Derivatives of p-alkoxybenzoic acids. Report No.22: α,β -Dimethyl-γ-methylpropyl-, and γ-dipropylaminopropyl esters of p-alkoxybenzoic acids. Izv.AN Arm.SSR. Khim.nauki 16 no.4: 365-372 '63. (MIRA 16:9)

1. Institut tonkoy organicheskoy khimii AN Armyanskoy SSR.

MNDZHOYAN, A.L.; AFRIKYAN, V.G.; KHORENYAN, G.A.

2-(1'-piperidyl)propanol. Sint. geterotsikl. soed. no.4:65-67 '59.
(MIRA 13:11)

(Pieridinepropanol)

MNDZHOYAN, A.L.; AFRIKYAN, V.G.; KHORENYAN, G.A.

Amines and their derivatives. Report No.12: Some N-furfuryl- and tetrahydrofurfurylamides as possible antispasmodics. Izv. AN Arm.SSR.Khim.nauki 14 no.4:363-368 '61. (MIRA 14:10)

1. Institut tonkoy organicheskoy khimii AN Armyanskoy SSR.
(Amides) (Antispasmodics)

MNDZHOYAN, A.L.; AFRIKYAN, V.G.; KHORENYAN, G.A.

Derivatives of furan. Report No.25: Some amino esters of tetrahydrofuran-2-carboxylic acid. Izv.AN Arm.SSR.Khim.nauki 14 no.1:67-70 '61. (MIRA 15:5)

1. Institut tonkoy organicheskoy khimii AN Armyanskoy SSR.
(Furoic acid)

MNDZHOYAN, A.L.; AFRIKYAN, V.G.; KHORENYAN, G.A.; VASIL'YEVA, T.N.;
ZHURULI, L.D.; KARAGEZYAN, S.G.

Derivatives of furan. Report No.28: Some thiosemicarbazones and semicarbazones of the furan series as possible antituberculosis drugs. Izv.AN Arm. SSR. Khim.nauki 15 no.4:391-397 '62. (MIRA 15:11)

1. Institut tonkoy organicheskoy khimii AN Armyanskoy SSR.
(Semicarbazones) (Furan) (Tuberculosis)

MNDZHOYAN, A.L.; AFRIKYAN, V.G.; KHORENYAN, G.A.; ALEKSANYAN, R.A.; STEPANYAN, N.O.

Derivatives of p-alkoxybenzoic acids. Part 23: Synthesis of aminoesters of 3-methoxy-4-alkoxybenzoic acids. Izv. AN Arm.SSR. Khim. nauki 18 no.2:193-199 '65. (MIRA 18:11)

1. Institut tonkoy organicheskoy khimii AN ArmSSR. Submitted April 18, 1964.

CHIBUKHCHYAN, Z.O.; KHORENYAN, R.A.

Determining the absolute age of hornbleade by the method of birefringence comparative dispersion. Dokl. AN Arm. SSR 37 no.5:277-279 '63. (MIRA 17:9)

1. Institut geologicheskikh nauk AN Armyanskoy SSR. Predstavleno akademikom AN Armyanskoy SSR I.G. Magak'yanom.

CHIBUKHCHYAN, Z.O.; KHORENYAN, R.A.

Composition and dispersion of the birefringence of potassium feldspars and monoclinic pyroxenes. Izv. AN Arm. SSR. Nauki o zem. 17 no.3/4:29-40 '64. (MIRA 17:11)

1. Institut geologicheskikh nauk AN Armyanskoy SSR.

KHORESHKIN M N.

J

Country : USSR
Category: Soil Science. Mineral Fertilizers.

Abs Jour: RZhBiol , No 14, 1958, No 63097

Author : Khoroshkin, M.N.
Inst : The Azov-Black Sea Agricultural Institute
Title : Manganese Microfertilizers.

Orig Pub: Sb nauchno-issled rabot. Azovo-Chernomorsk s -kh in-t, 1957, 15, 107-114

Abstract: No abstract.

Card : 1/1

J-43

KHORESHKO L. T.

PHASE I BOOK EXPLOITATION SOV/5084

International Conference on the Peaceful Uses of Atomic Energy. 2d, Geneva, 1958.

Doklady sovetskikh uchenykh. [t.4] Khimiya radioelementov i radiatsionnykh prevrashcheniy (Reports of Soviet Scientists. v. 4.: Chemistry of Radioelements and Radiation Transformations) Moscow, Atomizdat, 1959. 32_ p. 8,000 copies printed. (Series: Its: Trudy)

Ed. (Title page): A. P. Vinogradov, Academician; Ed.: V. I. Labaznov; Tech. Ed.: Ye. I. Mazel'.

PURPOSE: This collection of articles is intended for scientists and engineers interested in the applications of radioactive materials in science and industry.

COVERAGE: The book contains 26 separate studies concerning various aspects of the chemistry of certain radioactive elements and the processes of radiation effect on matter. These reports discuss present-day methods of reprocessing irradiated nuclear fuel, research in the chemistry of mercury, thorium, uranium, plutonium, and americium, problems related to the sorption and burying of radioactive wastes, the radiolysis of aqueous solutions and of organic compounds, the mechanism of polymer chain grafting, and the effect of radiation on natural and synthetic rubbers. V. N. Prusakov edited the present volume. Most of the reports are accompanied by references. Contributors to individual investigations are mentioned in annotations to the Table of Contents.

TABLE OF CONTENTS:

Vinogradov, A. P. Meteorites and the Earth's Crust (The Geochemistry of Isotopes) (Report No. 2525) 5

Shevchenko, V. B., I. S. Povitskiy, and A. S. Solovkin. Some Special Problems in the Reprocessing of Irradiated Heat-Producing Elements of the First Atomic Electric Power Plant of the USSR (Report No. 2182) 28
[The following personalities are mentioned as having taken part in this investigation: E. M. Indikov, K. P. Lunichkina, Ye. V. Ukraintsev, E. N. Tsvetkova, and V. V. Chubukov.]

Vdovenko, V. M., and M. P. Koval'skaya. Separation of Uranium and Plutonium From Fission Products by Extraction With a Mixture of Dibutyl Ether and Carbon Tetrachloride (Report No. 2216) 34

Vdovenko, V. M. Distribution of Fragmentation Elements in the Process of the Ether Extraction of Uranium and Plutonium (Report No. 2206) 41

Prusakov, V. N., N. P. Simonov, and N. M. Trotsenko. Dry Method of Regenerating Irradiated Uranium (Report No. 2253) 49
[The authors thank I. K. Kikoin and A. T. Kolotukhin.]

Brezhneva, N. Ye., V. I. Levin, G. V. Korpusov, N. M. Man'ko, Ye. K. Bogacheva, L. T. Khoreshko, and G. F. Platnova. Separation of Fragmentation Radioactive Elements (Report No. 2295) 57
[The authors thank S. Z. Roginskiy, Corresponding Member AS USSR.]

Ryabchikov, D. I., M. M. Senyavin, and Yu. S. Sklyarenko. Separation of Individual Rare Earth Elements (Report No. 2231) 75

Nikol'skiy, B. P., and V. I. Paramonova. Using Ion-Exchange to Study the State of Radioactive Substances in Solution (Report No. 2204) 89

Chernyayev, I. I., V. A. Golovnya, G. V. Ellert, R. N. Shchelokov, and V. P. Markov. Contribution to the Problem of the Structure of the Complex Compounds of Uranyl (Report No. 2133) 98
[The individual studies of the following researchers have been included in the last part of this paper: Ye. N. Traggeym, L. K. Shubochkin, T. V. Sergeyeva, and L. V. Tsapkina.]

Chernyayev, I. I., V. A. Golovnya, and A. K. Molodkin. Complex Carbonate Compounds of Thorium (Report No. 2136) 126
[A. M. Rubinshteyn is mentioned for his part in this study.]

(22)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722230001-4

BREZHNEVA, N.Ye.; LEVIN, V.I.; KORPUSOV, G.V.; PATRUSHEVA, Ye.N.;
MAN'KO, N.M.; KHORESHKO, L.T.

Separation of promethium-147 and europium-155 from a mixture of fission products by tributyl phosphate extraction. Radiokhimiia 6 no.3:265-276 '64. (MIRA 18:3)

KHORETLEV, A.O.

POKROVSKIY, Mikhail Vladimirovich; AUTLEV, M., red.; KHORETLEV, A., red.;
YEVTUSHENKO, M., tekhn.red.

[Russian - Adyge trade relations] Russko-adygeiskie torgovye sviazi.
Maikop, Adygeiskoe kn-vo, 1957. 112 p. (MIRA 11:4)
(Russia--Commerce--Caucasus)
(Caucasus--Commerce--Russia)

KHORETLEV, A.O.; ALFEROVA, T.D.; POKROVSKIY, M.V., red.; TSEY, U., tekhn. red.

[Russian - Adyge trade relations from 1793-1860; a collection of documents] Russko-adygeiskie torgovye sviazi 1703-1860 gg.; sbornik dokumentov. Maikop, Adygeiskoe knizhnoe izd-vo, 1957. 437 p. (MIRA 11:4)

1. Maykop. Adygeyskiy nauchno-issledovatel'skiy institut iazyka, literatury i istorii.
(Russia--Commerce--Caucasus, Northern)
(Caucasus, Northern--Commerce--Russia)

KHORETLEV, A. O.

KHORETLEV, A. O. -- "The School and Education in Adyge (19th Century and Beginning of the 20th)." Moscow, 1956. (Dissertation for the Degree of Candidate in Pedagogical Sciences).

So.: Knizhnaya Litopis', No. 7, 1956.

CA

25

PROCESSES AND PROPERTIES INDEX

White or colored patterns on cotton fabrics. E. Ya. Podreshetnikova and N. O. Khoretskii. Russ. 53,599, July 31, 1938. Cotton fabric is reserve-printed with an alkali metal silicate thickened for example with tragacanth, then treated with strong H_2SO_4, and mercerized.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

25

Obtaining a transparent effect on fabrics by the use of white and colored reserves. B. Ya. Pudreshetnikov, N. D. Khoretskii and N. B. Fedorova. *Khlopchatobumazhnaya Prom.* 8, No. 7-8, 52-5(1938); *Chem. Zentr.* 1939, I, 4255.—In order to obtain a transparent effect the unmercerized fabric was treated 10 sec. with H_2SO_4 of 51° Be. at 15-20°, the acid was pressed out, the fabric was passed through alkali of 20-30° Be. at ordinary temp. for 20-30 sec., and washed free of alkali in the cold. In order to produce a transparent effect in a pattern, Na silicate is impressed on those areas which are to be protected from the action of the acid. The acid reacts with the Na silicate and the pptd. SiO_2 protects the fabric. The SiO_2 is dissolved off by the alkali treatment. W. A. Moore

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

Khoretskiy, Nikolay Oskarovich

FEDOROVA, Nina Emel'yanovna; KHORETSKIY, Nikolay Oskarovich; BELEN'KIY, L.I., kandidat tekhnicheskikh nauk, redaktor; GUSEVA, Ye.M., redaktor; KONOPLEVA, A.I., retsentzent; NEKRASOVA, O.I., tekhnicheskiy redaktor

[Technical control in cotton finishing production] Tekhnicheskii kontrol' v khlopchatobumazhnom otdelochnom proizvodstve. Moskva, Gos. nauchno-tekhn. izd-vo Ministerstva tekstil'noi promyshl. SSSR, 1955. 291 p. (Cotton finishing) (MLRA 9:2)

KHOREV, A.I.

Work practices of a technological study unit. Opyt rab. po tekh. inform. i prop. no.2:29-31 '63. (MIRA 16:12)

1. Zaveduyushchiy tekhnicheskim kabinetom Frunzenskogo rayonnogo komiteta Kommunisticheskoy partii Sovetskogo Soyuza Leningrada.

USSR

ACCESSION NR: AP4006294 S/0286/63/000/023/0055/0055

AUTHOR: Khorev, A. I.; Glazunov, S. G.; Moiseyev, V. N.; Kaganovich, I. N.; Kushakevich, S. A.

TITLE: Weldable heat-resistant titanium alloy. Class 40, No. 159038

SOURCE: Byul. izobret. i tovarn. znakov, no. 23, 1963, 55

TOPIC TAGS: titanium alloy, heat resistant titanium alloy, weldable titanium alloy, titanium aluminum molybdenum alloy, zirconium containing alloy

ABSTRACT: An Author Certificate has been issued for a weldable heat-resistant titanium alloy containing aluminum and molybdenum. To improve mechanical properties and workability, the alloying elements are added in the following proportions: 3—5% aluminum, 2—4.5% molybdenum, and 0.01—0.02% zirconium.

ASSOCIATION: none

Card 1/2

ACCESSION NR: AP4006294

SUBMITTED: 13Nov62 DATE ACQ: 09Jan64 ENCL: 00

SUB CODE: ML NO REF SOV: 000 OTHER: 000

Card 2/2

KHOREV, A.I.; MOISEYEV, V.N.; GRUZDEVA, L.A.; MOROZOV, L.N.

Effect of oxygen on the properties and heat treatment of the BT14 titanium alloy. TSvet. met. 36 no.11:69-74 N '63. (MIRA 17:1)

L 12616-65 EWT(m)/EWP(w)/EWA(d)/EWP(v)/EWP(t)/EWP(k)/EWP(b) Pf-4 IJP(c)
EM/MJW/JD/HM/HW

ACCESSION NR: AP4037403 S/0122/64/000/005/0035/0037

AUTHORS: Khorev, A. I. (Engineer); Moiseyev, V. N. (Candidate of technical sciences); Kazakevich, I. I. (Candidate of technical sciences)

B

TITLE: The use of titanium alloy VT14 in containers

SOURCE: Vestnik mashinostroyeniya, no. 5, 1964, 35-37

TOPIC TAGS: titanium alloy, heat treatment, welded joint, bursting pressure, rolling mill, water tempering/ VT2 alloy, VT14 titanium alloy

ABSTRACT: The thermal processing of titanium alloy VT14 was studied in order to clarify process influence upon durability of containers (formed from welded sheets) and of monolithic containers. Cylindrical containers were welded into units of 250 mm-thick diameter. The welded units were hardened and aged, then given sand treatments to remove the gas-saturated layer. The cylinders were ruptured by raising the internal hydraulic pressure. Rupture stress is given by the formula

$$\sigma_p = \frac{pD}{2\delta \cdot 100},$$

where p is the bursting pressure in kg/cm^2, D and δ are respectively the diameter

Card 1/3

L 12616-65
ACCESSION NR: AP4037403

18 4

and wall thickness in mm. Test results and mechanical properties of test specimens are presented in a table. It was noted that high rupture resistance obtains for the welded VT14 specimens hardened at a temperature of 850-870C with subsequent aging for four hours at a temperature of 580-600C, and also for specimens hardened at 820C and aged 16 hours at 520C. A plot was made showing the relationship of rupture stress and durability limit for both cylindrical and spherical containers. Two hemispheres of 6-mm wall thickness and 320-mm diameter were welded together into a spherical container. Use was made of soldering wire made from alloy VT2 to join the two hemispherical halves. A table is given showing test results and mechanical properties. The formula

$$\sigma_p = \frac{pD}{4\delta \cdot 100}$$

gives the bursting stress for the spherical specimens, which showed the most favorable properties when hardened in water with temperatures of 850-870C. Note was made that bursting occurred at or near the weld seams. Pipes of 180-mm diameter were made by welding sheets 2 mm thick. The pipes were then heated electrically and subjected to transverse rolling on a rolling mill of the Elektrostal'nyy zavod tyazhelnogo mashinostroyeniya (Electrosteel Plant of Heavy Machinery Construction); the specimens were subsequently welded. Again the specimens were burst and test results tabulated. Plastic deformation was observed

Card 2/3

L 12626-65
ACCESSION NR: AP4037403 18 7

for all specimens. A fourth table shows results for pipes of 145-mm diameter prepared by transverse rolling, followed by welding and water tempering at 870C and sand treatment. Transverse rolling yielded increased resistance up to 160 kg/mm^2. V. Ye. Shkol'nikov, Z. F. Muzhetskaya, I. P. Grishin, I. S. Tachkova, and Ye. A. Sheyntsvit participated in the experiments. Orig. art. has: 2 figures, 2 equations, and 4 tables.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00

SUB CODE: MM NO REF SOV: 001 OTHER: 000

Pressure Vessel 26

Card 3/3

L 32717-65 EWT(m)/EWA(d)/EWP(t)/EWP(k)/EWP(b) Pf-4 IJP(c) MJW/JD/HW
ACCESSION NR: AP4040684 S/0129/64/000/006/0002/0005

AUTHOR: Glazunov, S. G.; Khorev, A. I.; Moiseyev, V. N.

39
B

TITLE: Structural strength of heat hardened titanium alloys

27

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 6, 1964, 2-5, and insert facing p. 24

8 18 4

TOPIC TAGS: titanium alloy, VT6S titanium alloy, VT15 titanium alloy, VT16 titanium alloy, heat treatment, heat hardened titanium alloy, structural strength, strength, microstructure, tank fabrication

ABSTRACT: The possibility of making tanks with good structural strength from extruded pipe of heat hardened titanium alloys was investigated. Cylinders, 100 mm in diameter and with 1.5 mm wall thickness, were made of VT6S, VT15 and VT16 alloys subjected to different heat treatments. In the VT6S alloy greater structural strength was obtained with samples extruded at 900C than at 1050C. Strengths to 147 kg/mm^2 (under pressure along both axes) were obtained by heat hardening (extrusion at 1000C, annealing 30 min. at 800C, holding at 450C for 25 hours and at 560C for 15 min.). VT15 is more aniostropic and more brittle than VT16. The

Card 1/2

L 32717-65

ACCESSION NR: AP4040684

0

greatest strength in VT16 was obtained by extruding at 870C, 85% deformation, water cooling and holding at 510-520C for 16 hours. The microstructure showed the materials to be fine and granular, and the grain boundaries jagged and eroded in some places. It is concluded that heat treatment can be used to increase the structural strength of tanks made of VT16 alloy. Orig. art. has: 2 tables and 2 figures.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: MM

NO REF SOV: 000

OTHER: 000

Card 2/2

L 8945-65 EWT(m)/EWP(k)/T/EWP(q)/EWP(b) Pf-4 IJP(c) MJW/JD/HW

ACCESSION NR: AP4044138 S/0129/64/000/008/0037/0038

AUTHOR: Glazunov, S. G.; Khorev, A. I.

B

TITLE: Effect of high-temperature thermomechanical treatment on the strength of VT15 alloy in biaxial tension

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 8, 1964, 37-38

TOPIC TAGS: VT15 alloy, VT15 alloy burst strength, high temperature thermomechanical treatment, titanium alloy thermomechanical treatment, VT15 alloy thermomechanical treatment, titanium alloy burst strength

ABSTRACT: Four VT15 titanium tubes with a wall thickness of 1.37—1.62 mm were extruded at 1050C. Two of the tubes were immediately water quenched; two others were air cooled to room temperature, then annealed at 800C for 30 min and water quenched, which is conventional procedure for the VT15 alloy. The former treatment was a high-temperature thermomechanical (HTTM) treatment, since rapid cooling preserved the structure produced by high-temperature deformation. Five containers were made from each tube. Both types of containers were double aged at 480C for 10—25 hr and at 560C for 15 min (a conventional procedure), and then subjected to a burst test. The containers made of conventionally

Card 1/2

L 8945-65

ACCESSION NR: AP4044138

0

treated tubes failed in a brittle manner at a burst strength of 125—128 kg/mm . Increase of the temperature of the second aging to 590C and of its duration to 30 min had an adverse effect. The containers made of HTTM-treated tubes failed in a ductile manner at a strength of 153—160 kg/mm^2. In this case a prolonged second aging at 590C did not improve strength or ductility. The structure of aged containers consists of β-phase with broken grain boundaries. In the HTTM-treated containers, the grain boundaries are much thinner and the grains are more nearly homogeneous than in conventionally treated containers. The HTTM treatment appears to hinder the segregation of alloying elements and to prevent the diffusion of impurities to grain boundaries. Orig. art. has: 2 tables.

ASSOCIATION: none

SUBMITTED: 00 ATD PRESS: 3107 ENCL: 00

SUB CODE: MM NO REF SOV: 000 OTHER: 000

Card 2/2

L 13996-65 EWT(d)/EWT(m)/EWP(w)/EWA(d)/EWP(v)/EWP(t)/EWP(k)/EWP(b)/EWA(h) Pf-4/
Peb IJP(c)/ASD(m)-3 EM/RM/MJW/JD/HW
ACCESSION NR: AP4047014 B S/0135/64/000/010/0027/0028

AUTHOR: Glazunov, S. G. (Doctor of technical sciences); Khorev, A. I. (Engineer); Moiseyev, V. N. (Engineer); Geras'kova, L. V. (Engineer)

TITLE: Effect of plastic deformation on the structure and mechanical properties of welded joints in VT14, VT15, and VT16 titanium alloys
18 14 14 14 27

SOURCE: Svarochnoye proizvodstvo, no. 10, 1964, 27-28

TOPIC TAGS: titanium alloy, titanium alloy weld, weld cold working, weld cold rolling, cold rolled weld, titanium alloy welding
14

ABSTRACT: Hot rolled VT14, VT15, and VT16 titanium-alloy sheets 3 mm thick were cold rolled to thicknesses of 2.4—1.2 mm and cut in halves in the longitudinal direction. The halves were joined by argon-shielded arc welding, annealed at 780—800C, cold rolled to a thickness of 1.2 mm (which corresponded to reductions of 0—60%), and heat treated under various conditions. The treatment described, especially at reductions of at least 30—40%, was found to improve the structure and consequently the mechanical properties of the welds and the heat-

Card 1/5

L 13996-65

ACCESSION NR: AP4047014 2

affected zones (see Figs. 1-3 of the Enclosure) to such an extent that the failure frequently occurred in the base metal. The process can be applied to welded cylindrical or conical shells, which can be cold worked by spinning. 16 Orig. art. has: 3 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 00	ENCL: 03	SUB CODE: MM, IE
NO REF SOV: 000	OTHER: 000	ATD PRESS: 3137

Card 2/5

L 13996-65
ACCESSION NR: AP4047014

ENCLOSURE: 01

0

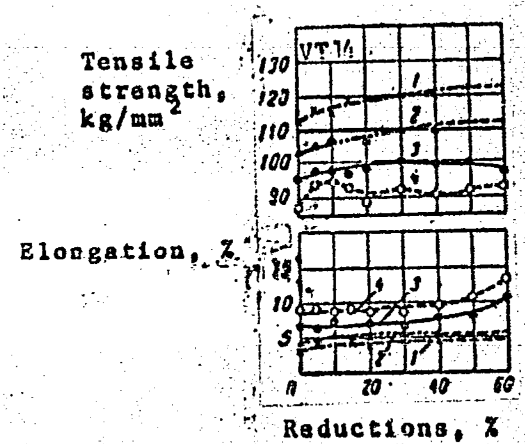

Fig. 1. Effect of plastic deformation on properties of VT14 alloy

1 - Quenched from 850C, aged at 520C for 16 hr; 2 - quenched from 850C, aged at 560C for 4 hr; 3 - air cooled from 800C; 4 - quenched from 850C.

Card 3/5

L 13996-65
ACCESSION NR: AP4047014

ENCLOSURE: 02

0

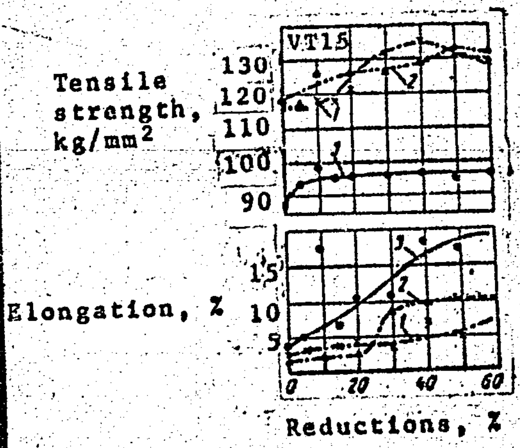

Fig. 2. Effect of plastic deformation on properties of VT15 alloy

1 - Quenched from 800C, aged at 480C for 25 hr and at 560C for 1 hr; 2 - quenched from 800C, aged at 480C for 25 hr and at 560C for 0.25 hr; 3 - air cooled from 800C.

Card 4/5

L 13996-65
ACCESSION NR: AP4047014

ENCLOSURE: 03

0

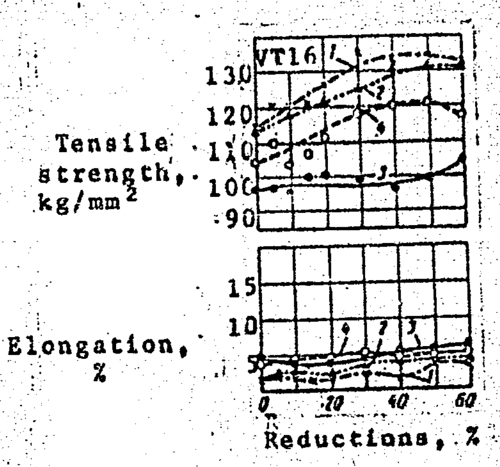

Fig. 3. Effect of plastic deformation on properties of VT16 alloy

1 - Quenched from 790C, aged at 500C for 8 hr; 2 - quenched from 790C, aged at 480C for 16 hr; 3 - quenched from 790C, aged at 540C for 8 hr; 4 - air cooled from 780C.

0901 1722

L 6911-66 EWT(m)/EWP(k)/EWA(c)/T/EWP(b)/EWP(v)/EWP(t) IJP(c) JD/HM

ACCESSION NR: AP5000060 S/0286/64/000/021/0068/0068

45
B

AUTHOR: Glazunov, S. G.; Gruzdeva, L. A.; Moiseyev, V. N.; Poplavko-Mikhaylov, M. V.; Khorev, A. I.; Mikhaylov, B. N.

55,44 55,44 55,44 55,44 55,44 55,44

TITLE: Filler material for welding titanium alloys with a high content of β-phase. Class 49, No. 166221

55,44,15 4455,27

SOURCE: Byul. izobr. i tovar. znakov, no. 21, 1964, 68

TOPIC TAGS: titanium, titanium alloy, beta titanium alloy, welding, filler wire, electrode wire

ABSTRACT: This Author Certificate introduces a titanium-base filler alloy for welding titanium alloys with a high content of β-phase. To make the filler suitable for any such titanium alloys and to improve the ductility of the weld metal, the filler alloy contains 1—3% Al and 8—10% Mo.

ASSOCIATION: none

SUBMITTED: 16Oct61 ENCL: 00 SUB CODE: MM, IE

NO REF SOV: 000 OTHER: 000 ATD PRESS: 3148

Card 1/1 rlo

L 25667-65 EWT(m)/EPF(n)-2/EPR/EWA(d)/EWP(t)/EWP(b) Ps-4/Pu-4 IJP(c) MJW/JD/
JG
ACCESSION NR: AP5003377 S/0136/65/000/001/0084/0089

32
27
B

AUTHOR: Khorev, A. I.; Moiseyev, V. N.

TITLE: The Ti-Al-Mo-Fe system

SOURCE: Tsvetnyye metally, no. 1, 1965, 84-89

TOPIC TAGS: titanium alloy, aluminum containing alloy, molybdenum containing alloy, iron containing alloy, alloy microstructure, alloy mechanical property, VT 14 alloy

ABSTRACT: The feasibility of substituting ferromolybdenum for molybdenum in VT-14 titanium alloy (4.0% Al, 3.8% Mo, 0.05% Zr) has been investigated with alloy specimens containing 3.94—4.3% Al, 2.1—3.5% Mo, and 0.7—3.0% Fe. Increasing Mo and Fe content decreased the $\alpha + \beta \rightleftarrows \beta$ transformation temperature from 930 to 830C. Alloys with Mo and Fe contents lower than the critical (2.1% Fe at 2.5—3.5% Mo) have a martensitic structure of the α-phase when quenched from the β-phase region. In alloys with a higher than normal content of alloying elements, the β-phase is fully preserved by quenching. With increased Mo and Fe contents, the tensile and yield strengths of alloys annealed at all temperatures, the tensile strength of alloys, and the strength of heat-treated welds increases. Combined alloying with 3.0% Fe and 3.5% Mo can lead to the appearance of the ω-phase in quenching. Alloys

Card 1/2

L 25667-65
ACCESSION NR: AP5003377

O

containing 0.5% Fe annealed at 750C and air cooled had the best formability. The ductility of heat-treated weld metal was close to that of the base metal for all alloys. A weld tensile strength of 120—130 kg/mm^2 was achieved in alloys containing 2—3% Fe. In general, the results showed the feasibility of developing a Ti-Al-Mo-Fe alloy with the properties analogous to those of the VT-14 alloy. Orig. art. has: 4 figures and 2 tables. [MS]

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM

NO REF SOV: 000

OTHER: 000

ATD PRESS: 3185

Card 2/2